

## INTERST TO COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE  
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON  
THE SOUTHERN RAILWAY NEAR JULIETTE, GA., ON  
AUGUST 2, 1925.

November 4, 1925.

To the Commission

On August 2, 1925 there was a rear-end collision between a passenger train and a work train on the Southern Railway near Juliette, Ga., resulting in the death of one employee, and the injury of eight passengers, one official, and one employee.

Location and method of operation

This accident occurred on that part of the Atlanta Division extending between Atlanta and Macon, Ga., a distance of 87.8 miles, in the vicinity of the point of accident. This is a single-track line over which trains are operated by time-table, train orders and a manual block-signal system. The accident occurred at a point about 2.7 miles south of Juliette, approaching this point from the south the track is tangent for a distance of 41.0 feet, followed by a  $30^{\circ} 58.8'$  curve to the left 83.8 feet in length, the accident occurring on this curve at a point 47.6 feet from its northern end. The grade is practically level. Owing to a side hill cut and the curvature of the track the view from the cab of a northbound engine is materially restricted. The speed of passenger trains is limited to 48 miles an hour.

The weather was clear at the time of the accident, which occurred at about 2.38 p. m.

Description

Work train extra 842 consisted of engine 842, one derrick car, two tool cars, two box cars, one work car, one bunk car, one flat car, and a caboose, and

was in charge of Conductor Almond and Engineman Simpson. It was engaged in clearing the wreckage of the derailment of train No. 4, which had occurred early in the morning, and was standing with its rear end at a point 1,074 feet south of the trestle at mile post 219.5 when it was struck by train No. 24.

Northbound passenger train No. 24 consisted of one combination baggage and passenger car, one coach, and one Pullman car, all of steel construction, hauled by engine 1327, and was in charge of Conductor Stevens and Engineman Pittman. At Dames' Ferry about 5 miles south of mile post 219.5, a copy of a clearance card, Form 603, was received, containing the following instructions:

"Block is permissive on Work Extra 842"  
The crew also received a copy of train order No. 780, Form 31, reading as follows

"Reduce speed to Six 6 miles an hour  
from trestle 219.5 to 200 yards south."

In addition, Flagman Van Linge, of work extra 842, secured Engineman Pittman's signature to work-train order No. 43, Form 895, and also furnished him with a copy of it. The body of this order read as follows, the words and figures underscored being those filled in on the printed form:

"All northbound trains will approach  
219.5 M P very carefully expecting to  
find Work Extra 842 occupying main  
track at that point.

"Work Extra 842 will clear at Juliette  
when run in."

Almond Conductor.  
Work Extra 842"

Train No. 24 left Dames' Ferry at 2.31 p. m., 10 minutes late, and collided with the rear of the work train while traveling at a speed variously estimated to have been between 30 and 45 miles an hour.

The caboose and two cars in the work train were demolished, and some of the others damaged. Engine 1327 was considerably damaged, but none of the

equipment in this train was derailed. The employee killed was a special officer.

#### Summary of evidence

According to the statements of Conductor Almond, of work extra 842, when his train arrived at Dames' Ferry he left Flagman Van Linge at that point with instructions to hold all northbound trains until work extra 842 returned. Later in the day work extra 842 returned to Dames' Ferry in order to allow trains Nos. 27 and 28 to proceed as far as the scene of the accident for the purpose of transferring passengers and baggage, and it was going to return again for the purpose of allowing trains Nos. 24 and 25 to do likewise when the engineman of the work extra said the water supply in the tender was getting low. As the temporary track around the wreckage was nearly completed it was decided to allow train No. 24 to pass Dames' Ferry and proceed to the scene of the derailment, when it arrived at that point, work extra 842 was to move northward to Juliette, where water could be obtained, using the rights of train No. 24 in order to make the movement. Conductor Almond told the operator at Dames' Ferry to call the flagman to the telephone but was unable to make the flagman understand and so the operator was recalled to the telephone and Conductor Almond said he told him to tell the flagman to allow train No. 24 to proceed and to look out for the work extra at a point just south of mile post 219.5. The operator, however, did not understand that part of the instructions which related to looking out for the work extra south of the point referred to and notified Flagman Van Linge that they were to look out for the work extra at mile post 219.5. Flagman Van Linge then wrote out the instructions on Form 895 as work-train order No. 43 and delivered a copy of them to Engineman Pittman as previously mentioned. Conductor Almond said that if his train had left the point designated in work train order No. 43 it would have been necessary for him to put out an additional flagman, but in this case he considered his train to be at the point he had designated, which was just south of mile post 219.5. His first knowledge of the approach of train No. 24 was when he heard a whistle and on looking in that direction he saw the train as it appeared around the curve, moving at a speed he estimated to have been about 45 miles an hour, and he said he did not think there was any material reduction in the speed prior to the time of the collision.

Enginemen Simpson and Fireman Carnes, of work extra 842, andrecking Foreman Collins, made various estimates as to the speed of train No. 24 at the time they saw it rounding the curve, these estimates varying between 35 and 45 miles an hour.

Assistant Trainmaster Page, in charge of the clearing of the wreckage of the derailment, said that after hearing that the engine of the work extra needed water he authorized Conductor Almond to have train No. 24 pass Dames' Ferry and then to move the work extra to Juliette on the time of train No. 24. Mr. Page heard the conversation of Conductor Almond with the operator at Dames' Ferry and said the conductor told the operator to let train No. 24 enter on a permissive card and to look out for the work extra at a point just south of mile post 219.5. When questioned with regard to the discrepancy between the instructions as given by the conductor and as received by Engineman Pittman, of train No. 24, he said he did not think they would have a tendency to create a misunderstanding, and he also said that as a permissive card had been issued to the crew of that train they should have operated their train under control the entire distance between Dames' Ferry and the point designated.

Operator Williamson, on duty at Dames' Ferry, said that just before train No. 24 arrived, Conductor Almond called Flagman Van Linge to the telephone and that finally he himself received the instructions from the conductor and communicated them to the flagman. He said the telephone was not working well and that the instructions as he understood them were to look out for the work extra at mile post 219.5. After giving the crew of train No. 24 a copy of the slow order, as well as other orders which had been issued, together with a clearance card Form 603 showing that the block was permissive on work extra 842, he said he told Engineman Pittman about the derailment and asked the engineman if he understood the situation, to which the engineman replied in the affirmative. He also said he told Engineman Pittman that probably he would have to wait at the scene of the derailment for a period of 30 or 40 minutes.

Flagman Van Linge said he understood Conductor Almond to say that he was to allow train No. 24 to proceed as far as mile post 219.5; he did not understand the conductor's other instructions and so allowed Operator

Williamson to receive them, and he said Operator Williamson told him to allow train No. 24 to proceed to mile post 219.5 and to hold all other trains. In making out the instructions, however, in work train order No. 47, Form 895, he addressed them to all northbound trains instead of only to train No. 24. Flagman Van Lange said a copy of this order was delivered to Engineman Pittman, who signed for it, read it and said that he understood the situation. Under rule 1295 enginemen are required to repeat to their firemen, in the presence of the flagman, information received in work train orders, but Flagman Van Lange said he did not hear the enginemen read the order to the fireman, although he thought that after reading it himself the enginemen gave the order to the fireman.

Engineman Pittman, of train No. 24, said he received the clearance card, Form 603, slow order No. 780, Form 31, and signed work order No. 47, Form 895, previously referred to, also receiving a copy of this order. He said that work train order No. 47 contained instructions to the effect that work extra 842 would be at mile post 219.5, that he read this order first and that it became fixed in his mind before he received slow order No. 780 and the clearance card, he was of the impression that slow order No. 780 was similar to the work order and that the speed was to be reduced to 6 miles an hour from mile post 219.5 to mile post 219, although as a matter of fact the conductor read the orders to him before they left Dames' Ferry. On passing mile post 220 the speed was about 30 miles an hour, he made an air brake application and inquired of Fireman Putrelle whether it was mile post 220, the mile post being on the fireman's side, and the fireman replied in the affirmative. Engineman Pittman said he made a further reduction in speed and on reaching a point about a car length from the rear of the work extra the fireman shouted a warning of danger and he immediately applied the air brakes in emergency, estimating the speed to have been about 20 miles an hour at the time of the collision. Engineman Pittman further stated that the accident occurred south of the point covered by the work order, and that had the work train been at mile post 219.5, at which point he expected to encounter it, or had the slow order read to reduce speed to 6 miles an hour from mile post 220 to mile post 219, in his opinion the accident would not have occurred. Engineman Pittman denied

being told by the operator that his train might be delayed 30 or 40 minutes at the scene of the derailment and was of the opinion he was responsible for the accident only to the extent that he overlooked that portion of the train order requiring the speed to be reduced to 6 miles an hour from a point 200 yards south of mile post 219.5 and he said he had not intended to reduce speed to 6 miles an hour at a point 200 yards south of mile post 219.5 but did intend to do so at the trestle at mile post 219.5, and, if necessary, to stop at that point. He thought that if he had understood the slow order correctly the accident would not have occurred, but said the order did not cover the points where the work train was actually working and that the accident was caused by improper flagging, saying that as an additional precaution a second flagman should have been stationed a short distance south of where the work extra was standing. When questioned as to how he would operate his train after receiving a permissive card authorizing him to enter an occupied block, no particular point being mentioned, he said it would be under control, so that he could stop short of any obstruction. The statements of Fireman Futrelle corroborated those of Engineman Pittman in substance, except that he understood the slow order correctly and when the engineman inquired concerning mile post 220 he thought this indicated that the engineman knew what he was doing. He estimated the speed when passing mile post 220 to have been 40 miles an hour, instead of 30 miles an hour as estimated by Engineman Pittman.

Conductor Stevens, of train No. 24, said that before leaving Dares' Ferry he received, among others, a copy of slow order No. 780, he did not see the flagging instructions held by the flagman of the work extra but was informed of their contents by Engineman Pittman, and he understood that the work extra would be at mile post 219.5, there was no misunderstanding on his part as to the territory covered by the slow order. When the train was in the vicinity of mile post 220 he heard a blast on the engine whistle and thinking that the train was approaching the scene of the derailment he reached for the communicating signal cord and then discovered that the engine was sounding a road crossing signal. He entered the baggage car, looked out of a door on the right side and then crossed over to the left side, it being at about this time that the air brakes were applied in emergency. It further appeared from his

statements that the speed of the train had been reduced from 48 or 50 miles an hour to about 35 miles an hour by a previous service application, and that it was still moving at a speed of 35 miles an hour when the emergency application was made, reducing the speed to about 20 miles an hour when the accident occurred. Conductor Stevens did not think the flagging instructions issued by the conductor of the work extra constituted a sufficient precaution and he said that if he had been the conductor of that train he would have given the exact location of his train, if he had then moved his train into territory outside of that covered by those instructions he would have put out another flagman. In this particular case he said the caboose of the work extra was approximately 150 yards outside of the territory covered by the slow order.

Baggagemaster Brady thought the speed of train No. 24 was 35 or 40 miles an hour when passing mile post 220 and about 20 or 25 miles an hour when the accident occurred, Flagman Lend made similar estimates.

Dispatcher Gunthorpe, on duty at the time of the accident, said that an engineman in possession of no information other than that contained on a clearance card filled out to indicate that a permissive movement was authorized should operate his train under control at all points, but after signing flagging instructions indicating that the train already in the block would be at a certain point the engineman would not expect to encounter that train before reaching the particular point designated and should be allowed to use his own judgment, and Dispatcher Gunthorpe expressed the opinion that if he had been running the engine he would consider he had the right to maintain schedule speed up to the designated point.

In a letter to the Commission's inspectors, Superintendent Clements said that under the rules permissive cards are authorized under unusual circumstances, and that when a train enters a block holding such a card the engineman and conductor are responsible for the movement of that train under control throughout the entire block. Train No. 24 was in the block under authority of a permissive card, which was not superseded by the flagging instructions contained in work train order No. 43, Form 895, and he considered that the collision was caused by Engineman Pittman operating his

train at an excessive rate of speed when holding a permissive card. Expressed in another way, he thought the operation of train under a permissive card should be the same as when it encounters a stop indication at an automatic signal in permissive automatic territory, that is, it should be operated under control throughout the entire block. Superintendent Clements further stated that double flagging would not be required unless the work extra moved from the location given in the flagman's instructions, which he said was not the case to any extent in this instance.

### Conclusions

This accident was caused by the failure of Engineman Pittman, of train No. 24, properly to understand a train order requiring the speed of his train to be reduced to 6 miles an hour beginning at a point 200 yards south of mile post 219.5, and by his failure properly to control the speed of his train when approaching the point where he knew the track was obstructed, a contributing cause was the misunderstanding as to the flagging instructions to be given to the crew of train No. 24, for which Conductor Almond, of work extra 842, is responsible.

Engineman Pittman in some unexplained way misread or misunderstood train order No. 780, and according to his statements was operating his train with the idea that the territory in which reduced speed was required began at mile post 219.5 and extended northward to mile post 219. As he was also in possession of a work-train order which said that work extra 842 would be at mile post 219.5 he assumed that the track would be clear until that exact point was reached, the result being that he was operating his train at a probable speed of at least 30 miles an hour when he was warned by the fireman of the train ahead. Had it not been for the presence of the work extra at that particular point it is very probable that his train would have been derailed on the temporary track built around the wreckage of the previous derailment, inasmuch as the beginning of the territory protected by the 6-miles-an-hour slow order was only about 135 yards beyond where the rear of the work extra was standing.

The work-train order received by Engineman Pittman advised him that the work extra would be at mile



post 219.5, whereas its rear end was actually encountered at a point nearly 1,100 feet farther south. While Engineman Pittman claims that the work extra was not at the exact point specified in the work train order, it is clearly evident he was not complying with the instructions to approach the designated point "very carefully," and in no way can he be considered justified in approaching the scene, on a curve to the left where the view even of the fireman was very materially restricted, at the rate of speed which his train was travelling in this instance. The rules of ordinary caution should have prompted Engineman Pittman to round this curve with his train under full control prepared to stop at any point between the end of the curve and the trestle at mile post 219.5.

Engineman Pittman was in possession of a clearance card authorizing a permissive movement, a slow order requiring a speed of 6 miles an hour beginning a short distance beyond where the collision occurred, and a work-train order instructing him to approach mile post 219.5 very carefully expecting to find work extra 842 occupying the main track at that point, had he governed himself in accordance with the various instructions received in approaching the vicinity of the derailment of train No. 4, he would have been able to stop in ample time to avoid the collision with the rear end of the work extra.

Conductor Almond said his flagging instructions were that train No. 24 should be allowed to enter the block, looking out for the work extra at a point just south of mile post 219.5, in which statement he was corroborated by Assistant Trainmaster Page. Flagman Van Linge understood that he was to allow train No. 24 to enter the block and to proceed as far as mile post 219.5, did not understand the subsequent remarks of the conductor, and subsequently had Operator Williamson end ~~for~~ ~~and~~ hear what the conductor was saying. Operator Williamson's understanding of what the conductor said was similar to that of Flagman Van Linge, and the flagging instructions were issued accordingly. The issuing of flagging instructions, especially to the flagmen of work trains, is of paramount importance, and under no circumstances should movements be made under the authority of those instructions until it is known beyond any doubt that they are thoroughly understood. Such was not the case in this instance, and it is

possible that the accident would not have occurred had the instructions contained in work-train order No. 43 stated that work extra 842 would be just south of mile post 219.5 instead of stating that the train would be at the mile post.

An acoustic automatic train stop or train control device would have prevented the occurrence of this accident.

The employees involved were experienced men. At the time of the accident the crew of train No. 24 had been on duty about 1 hour while the crew of work extra 842 had been on duty between 7 1/2 and 8 hours; previous to going on duty all of these employees had been off duty periods ranging from 10 to nearly 18 hours.

Respectfully submitted,

W. P. BORDLAND  
Director.